



SAFETY DATA SHEET

Version No.2

Revision date: 25/03/24

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier:

Trade name:

24663 D2012 Epoxy Structural Adhesive Part 1.

1.2 Relevant Identified Uses:

Adhesive.

1.3 Details of the Supplier of the Safety Data Sheet:

Company name: Draper Tools Ltd
Address: Hursley Road, Chandler's Ford
Eastleigh, Hampshire SO53 1YF
Telephone: +44 (0) 23 80266355
Email: sales@drapertools.com
Contact person: Customer Service
Website: www.drapertools.com

1.4 Emergency Telephone Number:

+44 (0) 23 80266355 (not 24hrs)

2. Hazards Identification

2.1 Classification of the substance or mixture:

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411
Full text of H- and EUH-statements:	see section 16

Adverse physicochemical, human health and environmental effects. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLPI

Hazard pictograms (CLP) GHS07



GHS09



Signal word (CLP): Warning

Contains: bis-[4-(2,3-epoxipropoxy)phenyl] propane

Hazard statements (CLP):

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP):

P261 - Avoid breathing vapours, spray, mist, gas, fume, dust.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective clothing, eye protection, face protection.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P391 - Collect spillage.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII.

3. Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
bis-[4-(2,3-epoxipropoxy)phenyl]propane	CAS-No.: 1675-54-3	≥ 50 – < 80	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Chronic 2, H411
	EC-No.: 216-823-5		
	EC Index-No.: 603-073-00-2		
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol/BPFDE	EC-No.: 701-263-0	≥ 50 – < 80	Aquatic Chronic 2, H411

Specific concentration limits:

Name	Product identifier	Classification according to Regulation (EC) No. 1272/2008 [CLP]
bis-[4-(2,3-epoxipropoxy)phenyl]propane	CAS-No.: 1675-54-3	(5 ≤ C ≤ 100) Eye Irrit. 2, H319 (5 ≤ C ≤ 100) Skin Irrit. 2, H315
	EC-No.: 216-823-5	
	EC Index-No.: 603-073-00-2	

Full text of H- and EUH-statements: see section 16.

4. First Aid Measures

4.1. Description of first aid measures

First-aid measures after inhalation:

Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact:

Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion:

Call a poison centre or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact:

Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact:

Eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire:

Toxic fumes may be released

5.3. Advice for firefighters

Protection during firefighting:

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures:
Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment:
Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment: Collect spillage.

Methods for cleaning up:
Take up liquid spill into absorbent material.

Other information:
Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

7. Handling and Storage

7.1. Precautions for safe handling

Precautions for safe handling:
Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures:
Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions:
Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

8. Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection: Protective gloves: Nitrile rubber, Fluoroelastomer, Polyvinylchloride

8.2.2.3. Respiratory protection

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	yellowish.
Odour:	characteristic.
Odour threshold:	Not available
pH:	Not available
Relative evaporation rate (butylacetate=1):	No data available
Melting point:	Not applicable
Freezing point:	No data available
Boiling point:	> 200 °C
Flash point:	> 200 °C
Auto-ignition temperature:	Product is not explosive
Decomposition temperature:	No data available
Flammability (solid, gas):	Not applicable

Vapour pressure:	Not available
Relative vapour density at 20 °C:	No data available
Relative density:	No data available
Density:	1.18 g/cm ³
Solubility:	Not miscible.
Partition coefficient n-octanol/water (Log Pow):	No data available
Viscosity, kinematic:	10169.492 mm ² /s
Viscosity, dynamic:	12000 mPa.s
Explosive properties:	No data available
Oxidising properties:	No data available
Explosive limits:	No data available

9.2. Other information

No additional information available

10. Stability and Reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological Information

Acute toxicity (oral):	Not classified
Acute toxicity (dermal):	Not classified
Acute toxicity (inhalation):	Not classified

bis-[4-(2,3-epoxipropoxy)phenyl]propane (1675-54-3)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol/BPFDE

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:

Skin corrosion/irritation:	Causes skin irritation. pH: Not available
Serious eye damage/irritation:	Causes serious eye irritation. pH: Not available
Respiratory or skin sensitisation:	May cause an allergic skin reaction.
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified

bis-[4-(2,3-epoxipropoxy)phenyl]propane (1675-54-3)

NOAEL (chronic, oral, animal/male, 2 years)	15 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:, Remarks on results: other:
NOAEL (chronic, oral, animal/female, 2 years)	100 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:, Remarks on results: other:
Reproductive toxicity:	Not classified
STOT-single exposure:	Not classified
STOT-repeated exposure:	Not classified.

bis-[4-(2,3-epoxipropoxy)phenyl]propane (1675-54-3)

NOAEL (oral, rat, 90 days)	50 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol/BPFDE

NOAEL (oral, rat, 90 days)	≈ 250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Aspiration hazard:	Not classified

24663 PART 1

Viscosity, kinematic	10169.492 mm ² /s
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12. Ecological Information

Ecology - general:	Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute):	Not classified
Hazardous to the aquatic environment, long-term (chronic):	Toxic to aquatic life with long lasting effects.
Not rapidly degradable	
bis-[4-(2,3-epoxipropoxy)phenyl]propane (1675-54-3)	
LC50 - Fish [1]	1.2 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 72h - Algae [1]	9.4 mg/l Test organisms (species): Scenedesmus capricornutum
EC50 72h - Algae [2]	> 11 mg/l Test organisms (species): Scenedesmus capricornutum
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol/BPFDE

LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
LC50 - Fish [2]	5.7 mg/l Test organisms (species): Leuciscus idus
EC50 - Crustacea [1]	3.5 mg/l Test organisms (species): Daphnia magna
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.1. Persistence and degradability

No additional information available

12.2. Bioaccumulative potential

No additional information available

12.3. Mobility in soil

No additional information available

12.4. Results of PBT and vPvB assessment

B2012 PART 1

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.5. Other adverse effects

No additional information available

13. Disposal Considerations

13.1. Waste treatment methods

Waste treatment methods:






Dispose of contents/container in accordance with licensed collector's sorting instructions.

HP Code:

HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment.

14. Transport Information

In accordance with ADR / IMDG / IATA / ADN / RID.


ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 0, 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
14.3. Transport hazard class(es)				
9 	9 	9 	9 	9 
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes

No supplementary information available

14. Transport Information

14.6. Special precautions for user

Overland transport

Classification code (ADR):	M6
Special provisions (ADR):	274, 335, 375, 601
Limited quantities (ADR):	5I
Excepted quantities (ADR):	E1
Packing instructions (ADR):	P001, IBC03, LP01, R001
Special packing provisions (ADR):	PP1
Mixed packing provisions (ADR):	MP19
Portable tank and bulk container instructions (ADR):	T4
Portable tank and bulk container special provisions (ADR):	TP1, TP29
Tank code (ADR):	LGBV
Vehicle for tank carriage:	AT
Transport category (ADR):	3
Special provisions for carriage - Packages (ADR):	V12
Special provisions for carriage - Loading, unloading and handling (ADR):	CV13
Hazard identification number (Kemler No.):	90
Orange plates:	

Tunnel restriction code (ADR):	-
EAC code:	•3Z

Transport by sea

Special provisions (IMDG):	274, 335, 969
Limited quantities (IMDG):	5 L
Excepted quantities (IMDG):	E1
Packing instructions (IMDG):	LP01, P001
Special packing provisions (IMDG):	PP1
IBC packing instructions (IMDG):	IBC03
Tank instructions (IMDG):	T4
Tank special provisions (IMDG):	TP1, TP29
EmS-No. (Fire):	F-A
EmS-No. (Spillage):	S-F
Stowage category (IMDG):	A

Air transport

PCA Excepted quantities (IATA):	E1
PCA Limited quantities (IATA):	Y964
PCA limited quantity max net quantity (IATA):	30kgG

14. Transport Information

Air transport

PCA packing instructions (IATA):	964
PCA max net quantity (IATA):	450L
CAO packing instructions (IATA):	964
CAO max net quantity (IATA):	450L
Special provisions (IATA):	A97, A158, A197, A215
ERG code (IATA):	9L

Inland waterway transport

Classification code (ADN):	M6
Special provisions (ADN):	274, 335, 375, 601
Limited quantities (ADN):	5 L
Excepted quantities (ADN):	E1
Carriage permitted (ADN):	T
Equipment required (ADN):	PP
Number of blue cones/lights (ADN):	0

Rail transport

Classification code (RID):	M6
Special provisions (RID):	274, 335, 375, 601
Limited quantities (RID):	5L
Excepted quantities (RID):	E1
Packing instructions (RID):	P001, IBC03, LP01, R001
Special packing provisions (RID):	PP1
Mixed packing provisions (RID):	MP19
Portable tank and bulk container instructions (RID):	T4
Portable tank and bulk container special provisions (RID):	TP1, TP29
Tank codes for RID tanks (RID):	LGBV
Transport category (RID):	3
Special provisions for carriage – Packages (RID):	W12
Special provisions for carriage - Loading, unloading and handling (RID):	CW13, CW31
Colis express (express parcels) (RID):	CE8
Hazard identification number (RID):	90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

15. Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

16. Other Information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by
Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

The classification complies with: ATP 12

Compiled for original information from manufacturer.

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier:

Trade name:

24663 D2012 Epoxy Structural Adhesive Part 2.

1.2 Relevant Identified Uses:

Adhesive.

1.3 Details of the Supplier of the Safety Data Sheet:

Company name:

Draper Tools Ltd

Address:Hursley Road, Chandler's Ford
Eastleigh, Hampshire SO53 1YF**Telephone:**

+44 (0) 23 80266355

Email:

sales@drapertools.com

Contact person:

Customer Service

Website:

www.drapertools.com

1.4 Emergency Telephone Number:

+44 (0) 23 80266355 (not 24hrs)

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects.

May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) GHS07**Signal word (CLP):** Warning**Contains:**Poly[oxy(methyl-1,2-ethanediyl)],
 α -hydro- ω -hydroxy-, ether with
2,2-bis(hydroxymethyl)-1,3-
propanediol(4:1), 2-hydroxy-3-
mercaptopropylether**Hazard statements (CLP):**

H317 - May cause an allergic skin reaction.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP):

P261 - Avoid breathing vapours, spray, mist, gas, fume, dust.

P280 - Wear protective clothing, eye protection, face protection.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

3. Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Poly[oxy(methyl-1,2-ethanediyl)], α -hydro- ω -hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol(4:1), 2-hydroxy-3-mercaptopropylether	CAS-No.: 72244-98-5	≥ 80	Skin Sens. 1B, H317 Aquatic Chronic 3, H412
2,4,6-tris(dimethylaminomethyl)phenol	CAS-No.: 90-72-2 EC-No.: 202-013-9 EC Index-No.: 603-069-00-0	$\geq 5 - < 10$	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Chronic 3, H412

Full text of H- and EUH-statements: see section 16.

4. First Aid Measures

4.1. Description of first aid measures

First-aid measures after inhalation:

Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact:

Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact:

Rinse eyes with water as a precaution.

First-aid measures after ingestion:

Call a poison centre or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact: May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire:

Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting:

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures:

Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment:

Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment: Collect spillage.

Methods for cleaning up:

Take up liquid spill into absorbent material.

Other information:

Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

7. Handling and Storage

7.1. Precautions for safe handling

Precautions for safe handling:

Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures:

Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions:

Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

8. Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection: Protective gloves: Nitrile rubber, Fluoroelastomer, Polyvinylchloride

8.2.2.3. Respiratory protection

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless.
Odour:	Mild odor.
Odour threshold:	Not available.
pH:	Not applicable.
Relative evaporation rate (butylacetate=1):	No data available
Melting point:	Not applicable
Freezing point:	No data available
Boiling point:	260 °C
Flash point:	≥ 249 °C
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Flammability (solid, gas):	Not applicable

Vapour pressure:	Not available.
Relative vapour density at 20 °C:	No data available
Relative density:	Not available.
Solubility:	Insoluble in water.
Partition coefficient n-octanol/ water (Log Pow):	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	Not available.
Explosive properties:	No data available.
Oxidising properties:	Not available.
Explosive limits:	No data available

9.2. Other information

No additional information available

10. Stability and Reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological Information

Acute toxicity (oral): Not classified

Acute toxicity (dermal): Not classified

Acute toxicity (inhalation): Not classified

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)

LD50 oral rat 2169 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1916 - 2455

Skin corrosion/irritation: Not classified

pH: Not applicable.

Serious eye damage/irritation: Not classified

pH: Not applicable.

Respiratory or skin sensitisation: May cause an allergic skin reaction.

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: Not classified

STOT-repeated exposure: Not classified

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)

NOAEL (oral, rat, 90 days) 15 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other:

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Not classified

12. Ecological Information

12.1. Toxicity

Ecology - general:	Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute):	Not classified
Hazardous to the aquatic environment, long-term (chronic):	Harmful to aquatic life with long lasting effects.
Not rapidly degradable	

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)

LC50 - Fish [1]	> 100 mg/l Test organisms (species): Cyprinus carpio
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	46.7 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	25.5 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

13. Disposal Considerations

Waste treatment methods:

Dispose of contents/container in accordance with licensed collector's sorting instructions.

HP Code:

HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment.

14. Transport Information

In accordance with ADR / IMDG / IATA / ADN / RID.

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

No supplementary information available

14.6. Special precautions for user

Overland transport:	Not regulated
Transport by sea:	Not regulated
Air transport:	Not regulated
Inland waterway transport:	Not regulated
Rail transport:	Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

15. Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

16. Other Information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

The classification complies with: ATP 12

Compiled for original information from manufacturer.